GOODWE

User Manual

Smart DataLogger

EzLogger3000R

V1.2 -2025 -04-02

Trademarks

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NOTICE

The information in this document is subject to change due to product updates or other reasons. This document cannot replace the product labels or the safety precautions unless otherwise specified. All descriptions in the document are for guidance only.

CONTENT

1 About This document

This document describes the product information, installation, electrical connection, commissioning, troubleshooting, and maintenance. Read through this document before installing and operating the product. All the installers and users have to be familiar with the product features, functions, and safety precautions. This document is subject to update without notice. For more product details and latest documents, please visit https://en.goodwe.com.

1.1 Applicable Model

This document applies to the Smart DataLogger EzLogger3000R (EzLogger for short).

1.2 Target Audience

This document applies to trained and knowledgeable technical professionals only. The technical personnel has to be familiar with the product, local standards, and electric systems.

1.3 Symbol Definition

Different levels of warning messages in this document are defined as follows:

DANGER
Indicates a high-level hazard that, if not avoided, will result in death or serious injury.
WARNING
Indicates a medium-level hazard that, if not avoided, could result in death or serious injury.
CAUTION
Indicates a low-level hazard that, if not avoided, could result in minor or moderate injury.
NOTICE
Highlights key information and supplements the texts. Or some skills and methods to solve product-related problems to save time.

2 Safety Precaution

⚠ WARNING

The equipment is designed and tested strictly in compliance with related safety rules. Read and follow all the safety instructions and cautions before any operations. Improper operation might cause personal injury or property damage as the equipments are electrical equipment.

2.1 General Safety

NOTICE

- The information in this document is subject to change due to product updates or other reasons. This document cannot replace the product labels or the safety precaution unless otherwise specified. All descriptions in the document are for guidance only.
- Before installations, read through this document to learn about the product and the precautions.
- All installations should be performed by trained and knowledgeable technicians who are familiar with local standards and safety regulations.
- Strictly follow the installation, operation, and configuration instructions in this document. The manufacturer shall not be liable for equipment damage or personal injury if you do not follow the instructions. For more warranty details, please visit https://en.goodwe.com/warranty.

2.2 Personal Safety

⚠ DANGER

- Use insulating tools and wear personal protective equipment (PPE) when operating the equipment to ensure personal safety.
- Do not touch the equipment when it is short-circuited. Keep away from the equipment, and turn off the power immediately.
- Before electrical connections, disconnect all upstream switches to ensure the device is not energized.

2.3 Equipment Safety

⚠ DANGER

Make sure the equipment is installed at a solid and reliable place.

⚠ WARNING

- Use appropriate tools for proper installation, maintenance, etc.
- Observe local standards and safety regulations when operating the equipment.
- Unauthorized disassembly or modification may cause damage to the equipment, which is not covered within the warranty scope.

2.4 Labels

DANGER

- All labels and warning marks should be visible after the installation. Do not cover, scrawl, or damage any label on the equipment.
- Labels on the equipment are as follows.

	Do not dispose of the equipment as household waste. Discard the product in compliance with local laws and regulations, or send it back to the manufacturer.	CE	CE mark
ANATEL	ANATEL mark		

2.5 Personnel Requirements

NOTICE

- Personnel who install or maintain the equipment must be strictly trained, learn about safety precautions and correct operations.
- Only qualified professionals or trained personnel are allowed to install, operate, maintain, and replace the equipment or parts.

2.6 EU Declaration of Conformity

GoodWe Technologies Co., Ltd. hereby declares that the equipment with wireless communication modules sold in the European market meets the requirements of the following directives:

- Radio Equipment Directive 2014/53/EU (RED)
- Restrictions of Hazardous Substances Directive 2011/65/EU and (EU) 2015/863 (RoHS)
- Waste Electrical and Electronic Equipment 2012/19/EU
- Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No 1907/2006 (REACH)

3 Product Introduction

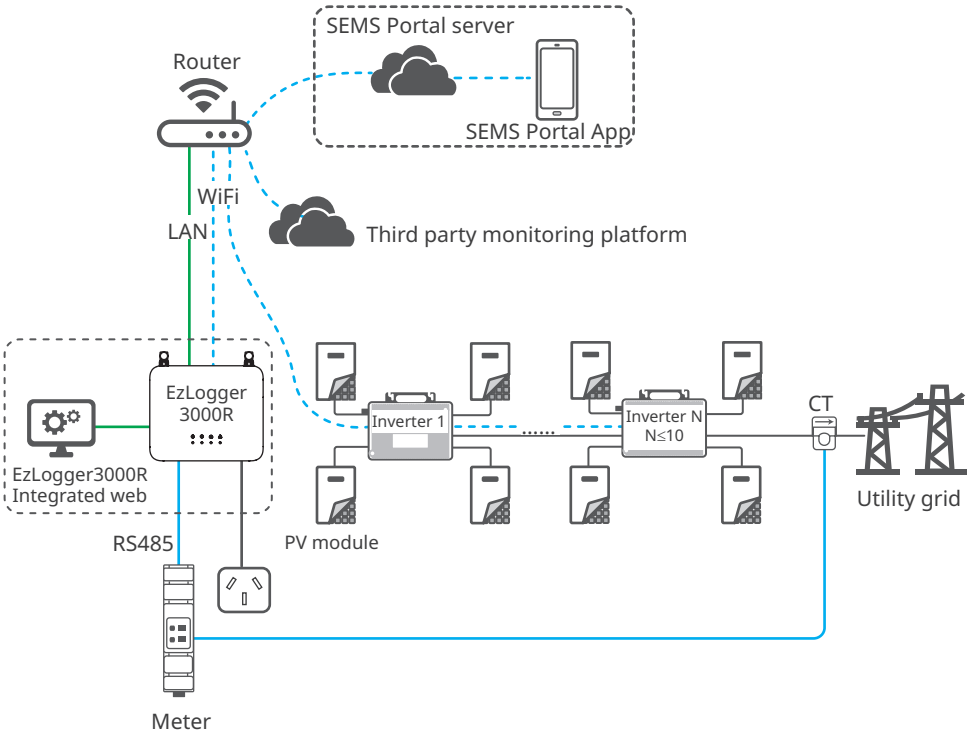
3.1 Functions

The EzLogger is applicable to micro inverter PV systems. It collects data and stores logs, sends the data to the monitoring platform, and remotely monitors, operates and maintains the system.

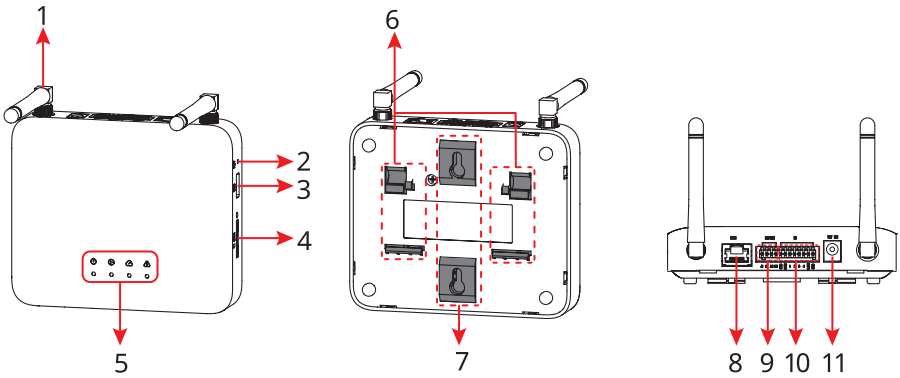
3.2 Networking

EzLogger is applicable to the PV systems via the following communication methods:

- RS485 communication, which enables communication between the EzLogger and devices like smart meters.
- Ethernet communication, which enables communication between the EzLogger and the router, PC and power plant monitoring system.
- Wireless communication which enables communication between the EzLogger and the router, micro inverters, and power plant monitoring system.

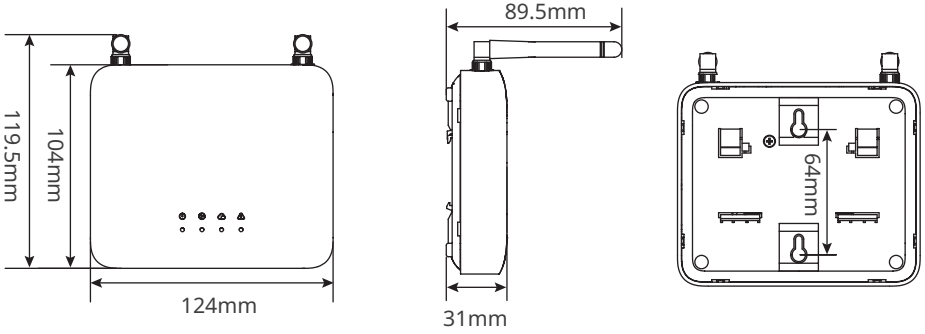


3.3 Parts



No.	Parts	Description
1	Antenna	• For WiFi wireless Communication • If the equipment is installed in a metal box or under a metal/concrete roof, an external antenna or RF extension cable is recommended to amplify signal. • Specifications of WiFi antenna: 2.4G • Number of the antenna may differ depends on the actual product.
2	Reset button (RST)	Short press (1-3 seconds): restart the equipment Long press (>5 seconds): restart the equipment and restores factory default network settings, such as network settings, MQTT settings, etc.
3	USB port (USB)	Connects to a USB flash drive, which can be used to read the data logs and update firmware version.
4	SIM card slot (SIM)	Reserved. Supports installing a SIM card for 4G communiction.
5	LED indicator	Indicates the equipment's working status.
6	DIN rail clamp	Installs the equipment on the DIN rail.
7	Screw mounting slot	Hangs the equipment on screws.
8	Ethernet communication port (ETH)	Communication port for the Ethernet cable.
9	RS485 communication port (RS485)	• Communication port for connecting RS485 communication cables. • Compatible smart meter: GMK110
10	DI communication port (DI)	• Digital input ports. • Supports connecting DI communication cable.
11	12V power input port (12V DC)	Support 12V DC power input.

3.4 Dimensions

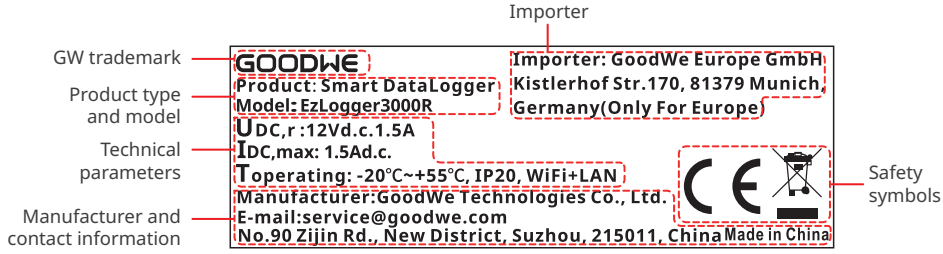


3.5 Indicators

Indicator	Definitions	Description
		Steady green: The device is powered on.
		Green off: Device power failure or abnormal power supply.
		Slow blinking green: The device is working properly.
		Green off: The device fails to work.
		Steady green: Communication between the device and the server is normal.
		Slow blinking green: Communication between the device and the router fails.
		Fast blinking green: Communication between the device and the router is normal, but communication between the device and the server fails.
		Steady red: All the inverters are in fault status.
		Red off: At least one inverter in the system is working properly.

3.6 Nameplate

The nameplate is for reference only.



4 Check and Storage

4.1 Check before Receiving

Check the following items before receiving the product.

1. Check the outer packing box for damage, such as holes, cracks, deformation, and others signs of equipment damage. Do not unpack the package and contact the supplier as soon as possible if any damage is found.
2. Check the product model. If the product model is not what you requested, do not unpack the product and contact the supplier.
3. Check the deliverables for correct model, complete contents, and intact appearance. Contact the supplier as soon as possible if any damage is found.

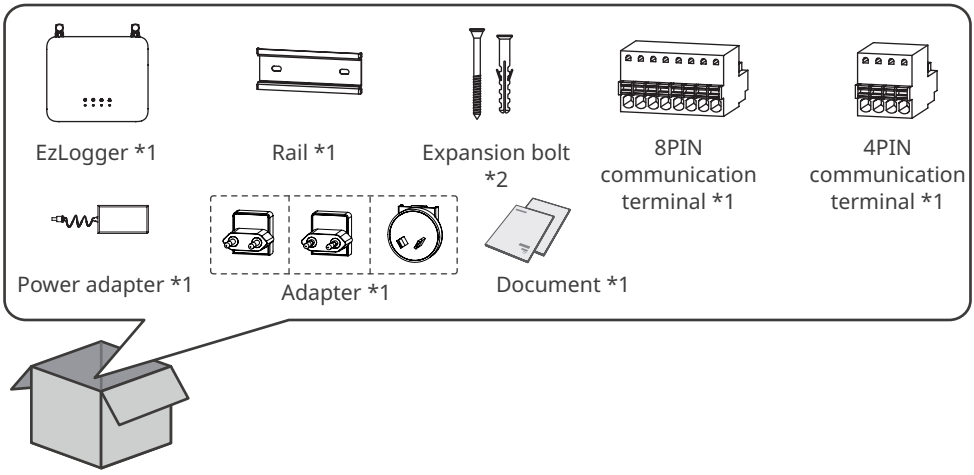
4.2 Storage

If the equipment is not to be installed or used immediately, please ensure that the storage environment meets the following requirements:

1. Do not unpack the outer package or throw the desiccant away.
2. Store the equipment in a clean place. Make sure the temperature and humidity are appropriate and no condensation.
3. If the equipment has been long term stored, it should be checked by professionals before being put into use.

4.3 Deliverables

NOTICE
• Connect the cables with the included terminals. The manufacturer shall not be liable for the damage if other terminals are used. • Adapter varies among different countries. The graphics are for reference only. The actual situation prevails.



5 Installation

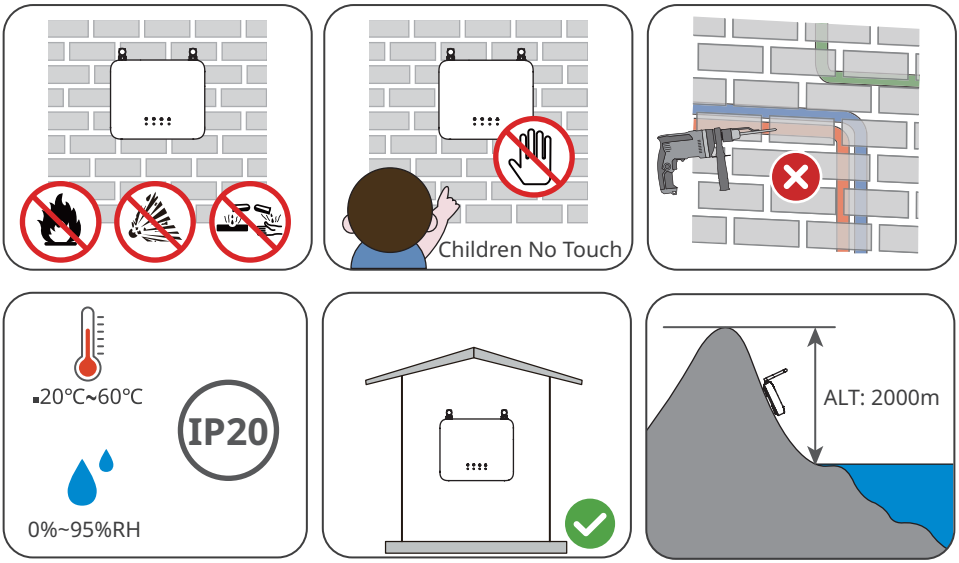
5.1 Installation Requirements

Installation Environment Requirements

1. Do not install the equipment in a place near flammable, explosive, or corrosive materials.
2. The place to install the equipment shall be well-ventilated for heat radiation and large enough for operations.
3. The equipment can be installed indoors.The temperature and humidity at the installation site should be within the appropriate range.
4. Do not install the equipment in a place that is easy to touch, especially within children's reach.
5. Install the equipment at a height that is convenient for operation and maintenance, electrical connections, and checking indicators and labels.
6. Install the equipment away from electromagnetic interference.

Mounting Support Requirements

- The mounting support shall be nonflammable and fireproof.
- Install the equipment on a surface that is solid enough to bear its weight.



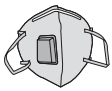
Installation Tool Requirements

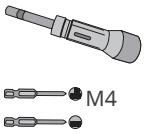
The following tools are recommended when installing the equipment. Use other auxiliary tools on site if necessary.


Goggles


Safety shoes


Safety gloves


Dust mask



Torque wrench


Diagonal pliers


Wire stripper

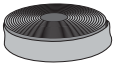

Hammer drill


Cable tie


Vacuum cleaner


Marker


Level


Heat shrink tube


Rubber hammer

5.2 EzLogger Installation

5.2.1 Wall-Mounting

NOTICE

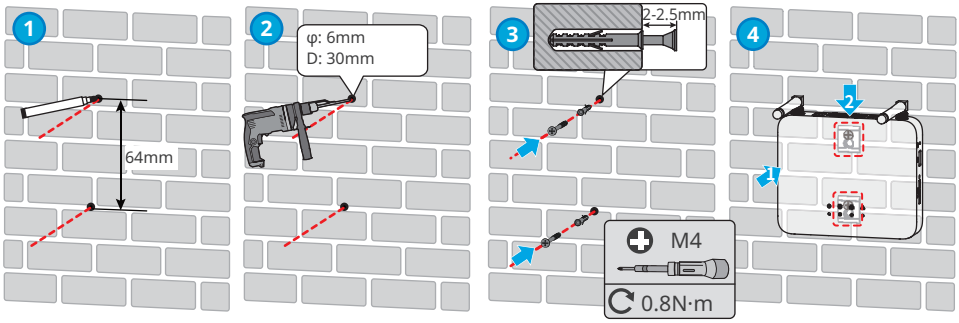
- Avoid the water pipes and cables buried in the wall when drilling holes.
- Wear goggles and a dust mask to prevent the dust from being inhaled or contacting eyes when drilling holes.

Step 1 Mark positions for drilling holes. Ensure that the marked holes match the mounting holes on the back of the equipment.

Step 2 Drill holes to a depth of 30mm using the hammer drill. The diameter of the drill bit should be 6mm.

Step 3 Install the expansion screws, leaving a length of 2-2.5mm outside the wall to hang the equipment.

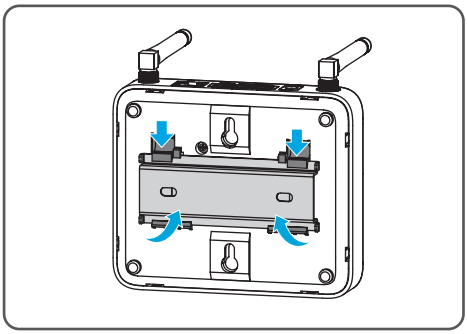
Step 4 Hang the equipment to the expansion screws and pull it down to ensure that equipment is mounted securely.



5.2.2 Rail-Mounting

NOTICE

- Ensure that the DIN rail is reliably installed on a solid surface.



5.2.3 Table-Mounting

The EzLogger supports table installation, which means place the equipment on a desktop.

NOTICE

- Mount the EzLogger on a horizontal table. Place it properly to avoid the equipment slipping and causing damage.
- Do not place the EzLogger in a place where it can be easily touched to avoid signal interruption caused by accidental touching.

6 Electrical Connection

6.1 Safety Precaution

DANGER

- Before electrical connections, disconnect all upstream switches to ensure the device is not energized. Do not work with power on. Otherwise, an electric shock may occur.
- Perform electrical connections in compliance with local laws and regulations. Including operations, cables, and component specifications.
- If the cable bears too much tension, the connection may be poor. Reserve a certain length of the cable before connecting it to the EzLogger.

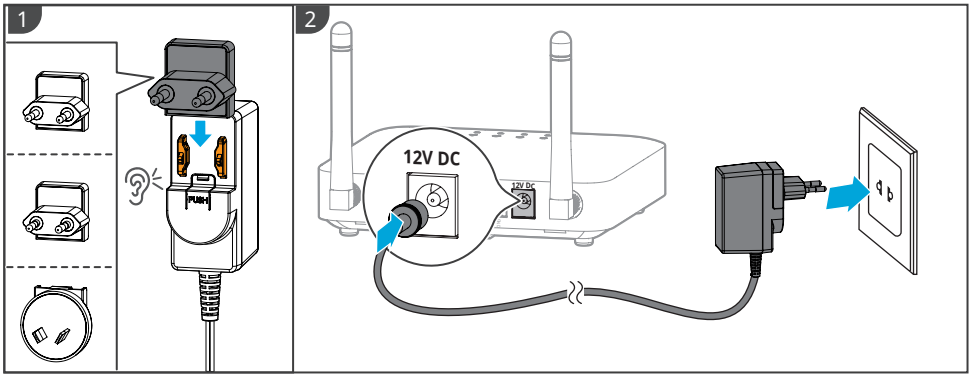
NOTICE

- Wear personal protective equipment like safety shoes, safety gloves, and insulating gloves during electrical connections.
- All electrical connections should be performed by qualified professionals.
- Cable colors in this document are for reference only. The cable specifications shall meet local laws and regulations.

6.2 Connecting the DC Input Cable

NOTICE

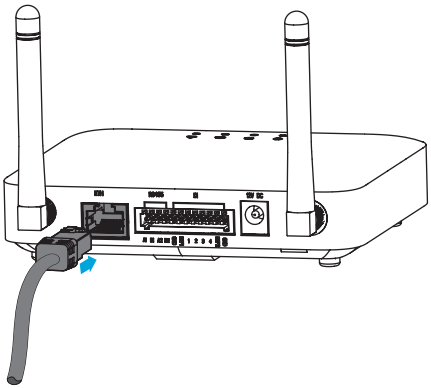
- Connect the power adapter included in the package to the EzLogger's DC input port for power supplying.
- Power adapter specifications: Input: AC 100V~240V, 50Hz/60Hz; Output: DC 24V, 1.5A, 18W.



6.3 Connecting the Ethernet Cable

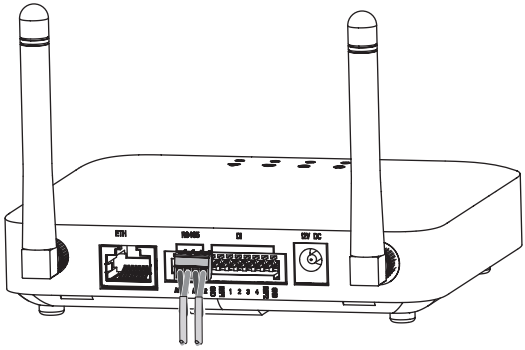
NOTICE

- Recommended cable specifications: network cable of Cat 5e or higher specifications and shielded RJ45 connectors.
- The default IP of the EHT port is172.18.0.12. Connects the ethernet cable to a computer to configure the parameters.
- Refer to Section 8.4.1 Setting Port Parameters for detailed instructions to configure the IP parameters of the ETH port.

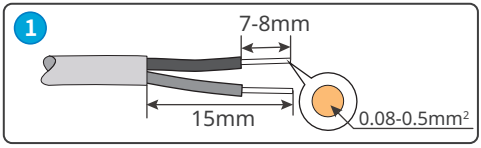


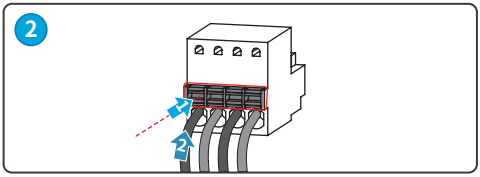
No.	Color
1	Orange and White
2	Orange
3	Green and White
4	Blue
5	Blue and White
6	Green
7	Brown and White
8	Brown

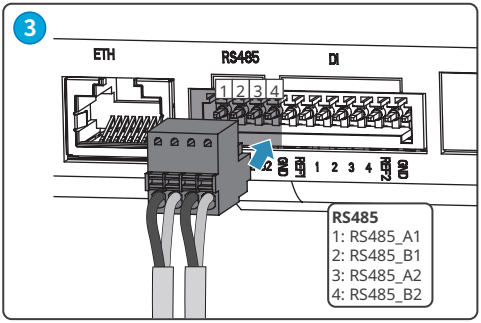
6.4 Connecting the RS485 Signal Cable



No.	Function	Silkscreen		Port Definition
1	The port can connect to the RS485 port of the smart meter.	RS485	A1	RS485_A1
2			B1	RS485_B1
3			A2	RS485_A2
4			B2	RS485_B2



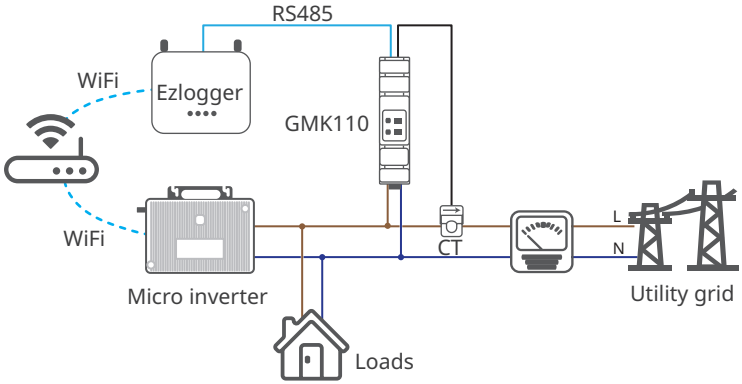




Power limit network

NOTICE

- GoodWe smart meter GMK110 is recommended.
- Ensure correct directions when installing the CT.



6.5 Connecting the DI Signal Cable

NOTICE

- The EzLogger can receive passive dry contact signal or active wet contact signal.
- It is recommended to keep the signal transmission distance within 10 meters.
- Connects the remote shutdown device to any DI port to realize Europe remote shutdown requirements. Or connects the Demand Response Enabling Device (DRED) as following to satisfy Australia DRED requirements.

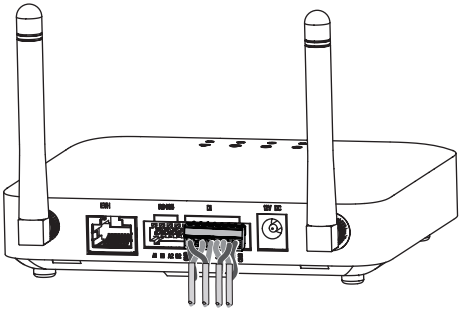
Passive contact

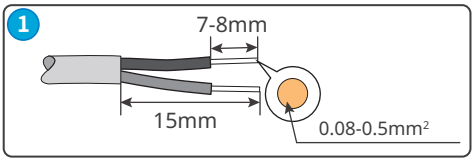
Function	Silkscreen		Port Definition
DI1	DI	REF1	REF1
		1	DI1
DI2		REF1	REF1
		2	DI2
DI3		REF2	REF2
		3	DI3
DI4		REF2	REF2
		4	DI4

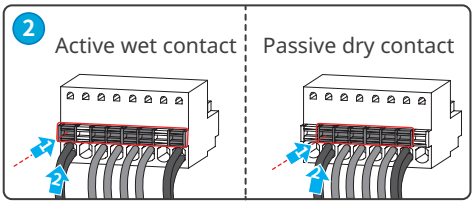
Active contact

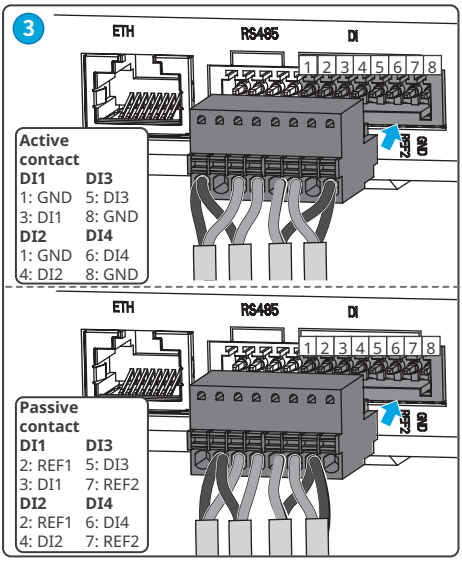
Function	Silkscreen		Port Definition
DI1	DI	GND	GND
		1	DI1
DI2		GND	GND
		2	DI2
DI3		GND	GND
		3	DI3
DI4		GND	GND
		4	DI4

No.	Function	Silkscreen		Port Definition
1	DRED	-	REF1	REFGEN
2		DI	1	DRM 5
3		DI	2	DRM 6
4		DI	3	DRM 7
5		DI	4	DRM 8
6		-	REF2	COM/DRM0





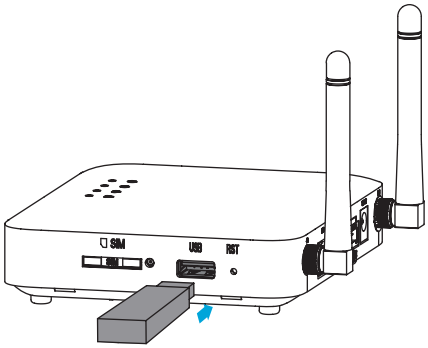




6.6 Installing the USB Flash Drive

NOTICE

- Install the USB flash drive into the USB port to upgrade the firmware.
- Prepare a FAT32 USB flash drive by yourself.

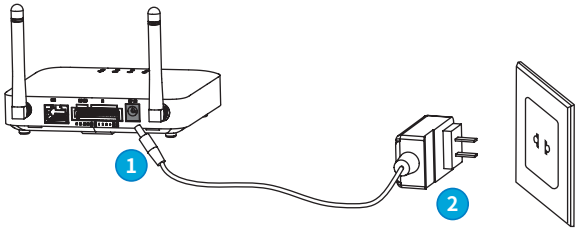


7 Equipment Commissioning

7.1 Check before Power On

No.	Check Item
1	The product is firmly installed at a clean place that is well-ventilated and easy-to-operate.
2	The power cable, net cable and communication cables are connected correctly and securely.
3	Cable ties are intact, routed properly and evenly.
4	The input signal status are correct and the input power parameters are within the operating scope of the equipment.

7.2 Power On



Connect the power adapter cable to the device and the AC socket side.
(Optional) Turn on the switch on the AC socket side.

8 System Commissioning

8.1 Indicators and Buttons

LED Indicators

Indicator	Definitions	Description
		Steady green: The device is powered on.
		Green off: Device power failure or abnormal power supply.
		Slow blinking green: The device is working properly.
		Green off: The device fails to work.
		Steady green: Communication between the device and the server is normal.
		Slow blinking green: Communication between the device and the router fails.
		Fast blinking green: Communication between the device and the router is normal, but communication between the device and the server fails.
		Steady red: All the inverters are in fault status.
		Red off: At least one inverter in the system is working properly.

Button

RST Button	Definition
Press 1~3S	Restart the equipment
Long press>5S	Restart the equipment and restores factory default network settings.

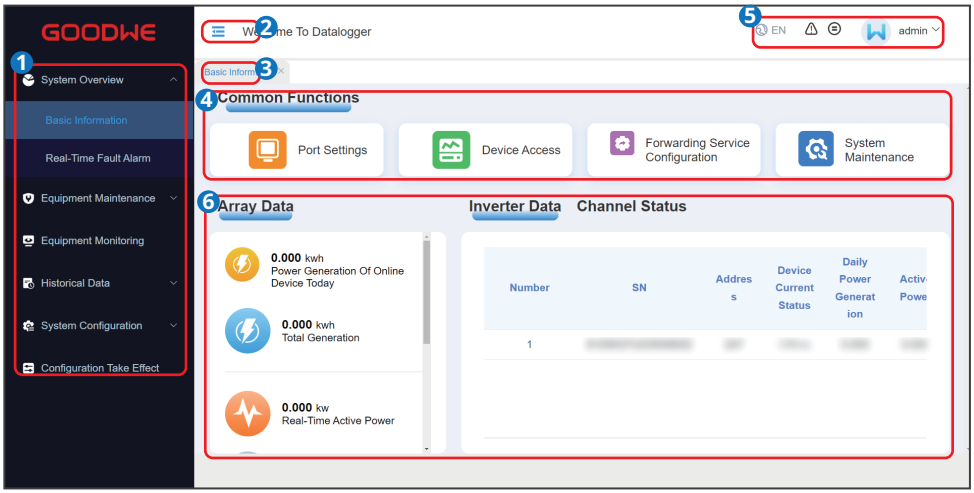
8.2 Introduction to Web UI

EzLogger supports equipment-related parameters setting, equipment operation information and error information viewing through the WEB interface, to get to know the system status timely.

WARNING

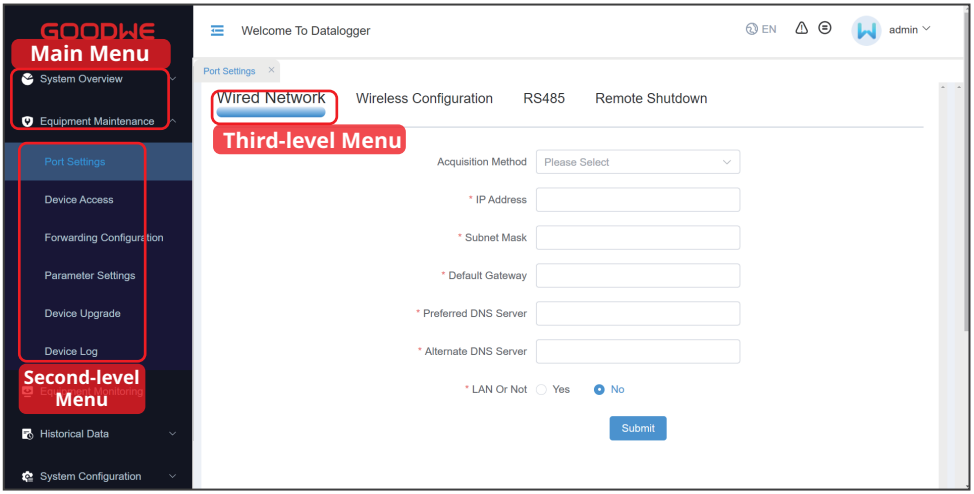
- The web software version shown in this document is V2.0.1. The screenshots are for reference only. The actual display may differ.
- The name, range, and default value of the parameters are subject to change.The actual display prevails.
- When issuing reset, shutdown and upgrade commands to the inverter, the inverter may fail to connect to the utility grid, which will affect the power generation.
- The grid parameters, protection parameters, feature parameters and power regulation parameters of the inverter shall be set by professionals. Improper settings may cause the inverter fail to connect to the grid. Wrong settings of power regulation parameters may cause the inverter connected to the grid improperly, thus affecting the power generation.
- To prevent the generating capacity from being influenced by wrong settings, the grid scheduling parameters shall be set by professionals.

Layout



No.	Function	Description
1	Menu list	Area for the menus. Choose the main menu, then the second-level menu will be displayed. Under some main menus, there are no second-level menu.
2	Menu list button	Click to hide or show the menu list.
3	Tag list	Displays the opened menu list.
4	Common functions	Displays the often used functions for easy operation. The common functions can be set in the menu list.
5	System status	• Selects the system language. • Displays the alarming information. Click it to check the real-time alarms. • Displays the version of the product. • Displays the log in status. Click it to log out.
6	Power plant data	Displays the corresponding functional items or parameter setting under each menu.

Menu on the Interface



Main Menu	Second-level Menu	Third-level Menu	Description
System Overview	Basic Information	-	• Common functions such as **Port Settings, Device Access, Forwarding Service Configuration, System Maintenance**. • Basic informations such as **Power Generation Of Online Device Today, Total Generation, Real-Time Active Power, Real-Time Reactive Power, Number Of Online Devices, Number Of Offline Devices**.
	Real-Time Fault Alarm	-	Displays **Total Number of Fault Alarms, Fault Alarm ID, Fault Alarm Name, Device SN,** and **Generation Time**. Clicks **Manual Refresh** to display the latest alarms.
Equipment Maintenance	Port Settings	Wired Network	Sets the wired network's parameters.
		Wireless Configuration	Sets the parameters of WiFi or 4G.
		RS485	Sets RS485 parameters of the equipment. Supports to connect with equipments via RS485. The baud rate of the RS485 includes 300, 1200, 2400, 9600, 19200 and 115200.
		Remote Shutdown	Sets remote shutdown parameters.
	Device Access	-	Adds devices.
	Forwarding Configuration	Modbus-TCP	Sets Modbus-TCP parameters.
		MQTT	Sets MQTT parameters.
	Parameter Settings	Data Loger	Sets the port setting, operating log setting, limited power grid connection, and DRM parameters of the EzLogger.
		Inverter	Sets the grid parameters, protection parameters, feature parameters, and power regulation parameters of the inverter.
	Device Upgrade	Data Logger	Upgrades fimware version of the EzLogger.
		Inverter	Upgrades fimware version of the inverter.
	Device Log	-	Checks the operation logs of the equipment
Equipment Monitoring	-	Data Logger	Checks the information of the EzLogger.
	-	Meter	Checks the information of the smart meter.
Historical Data	Historical Faults And Alarms	-	Checks the historical faults and alarms.

Main Menu	Second-level Menu	Third-level Menu	Description
System Configuration	System Maintenance	-	• Reset Logger • Restores factory settings • Imports all configuration files • Exports all configuration files
	System Time	-	Sets the way to calibrate the time: by system or manually.
	Security Settings	-	Sets security parameters like password.
	Version Information	-	Checks the version of the EzLogger, like SN, Main Program Version, Firmware Version, Web Version, etc.
Configuration Take Effect	-	-	Clicks to save the parameters. Clicks the Configuration Take Effect to save the settings after configuration adjustments.

8.3 Log In

NOTICE

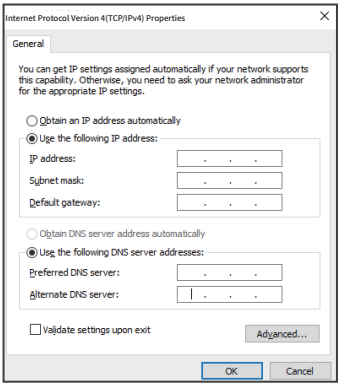
Before login, ensure that the equipment meets the following requirements:
- Supports Windows 7 or above version.
- Browser: Chrome 52, Firefox 58, or above version is recommended.
- The computer's network port is connected to EzLogger's ETH port with a network cable.

Steps

Log in to the web using a static IP address

Step 1 Connect the EzLogger to a computer using a network cable.

Step 2 Set the IP addresses of the EzLogger and the computer on the same network segment.



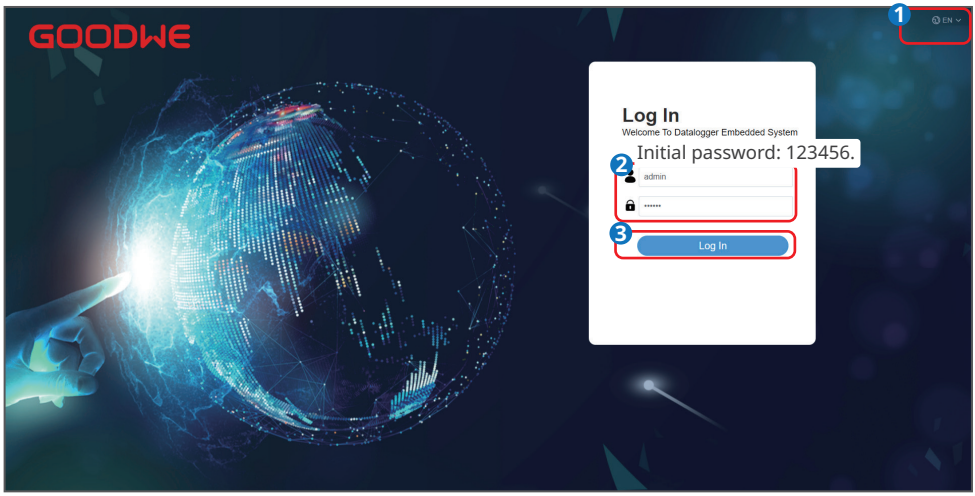
No.	IP Parameter	Default value of the EzLogger	Example value of the Computer
1	IP address	172.18.0.12	172.18.0.22
2	Subnet mask	255.255.255.0	255.255.255.0
3	Default gateway	172.18.0.1	172.18.0.1

Step 3 Enter **http://172.18.0.12**, or **https://172.18.0.12:443** in the address bar of the web browser and press **Enter**. **172.18.0.12** is the default IP address of the EzLogger and 443 is the default port of https.

Step 4 Select the language according to the actual demanding. Log in with the initial account and password.

NOTICE

Use the initial password to log in. Change the password as soon as possible and keep it in mind. To ensure the security of the account, it is recommended to change the password regularly.



Log in to the web using a dynamic IP address

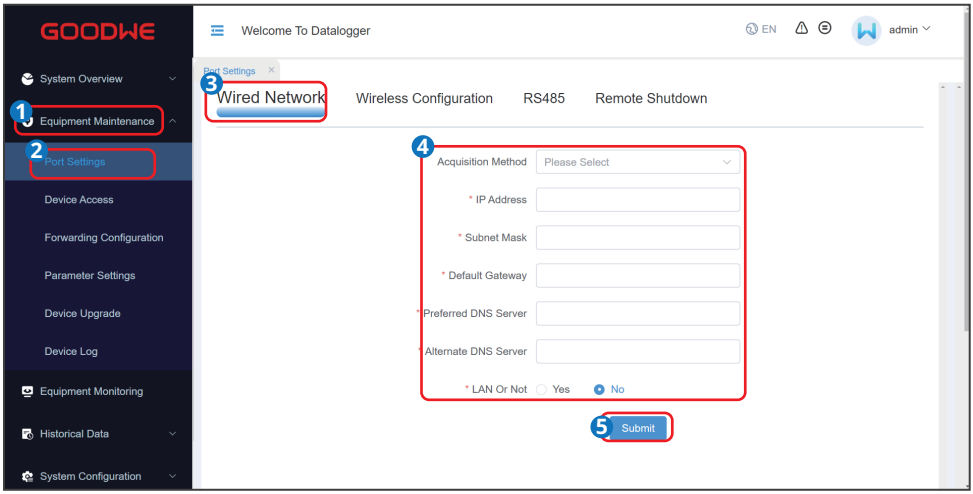
Step 1 Connect the EzLogger to a computer using a network cable.
Step 2 Check the IP address assigned to the gateway on the router management page.
Step 3 Enter **https://XX.XX.XX.XX**, or **http://XX.XX.XX.XX:443** in the address bar of the web browser and press **Enter**. XX.XX refers to the IP address of the EzLogger and 443 is the default port setting of https.
Step 4 Select the language according to the actual demanding. Log in with the initial account and password.

8.4 Setting Parameters

8.4.1 Setting the Port Parameters

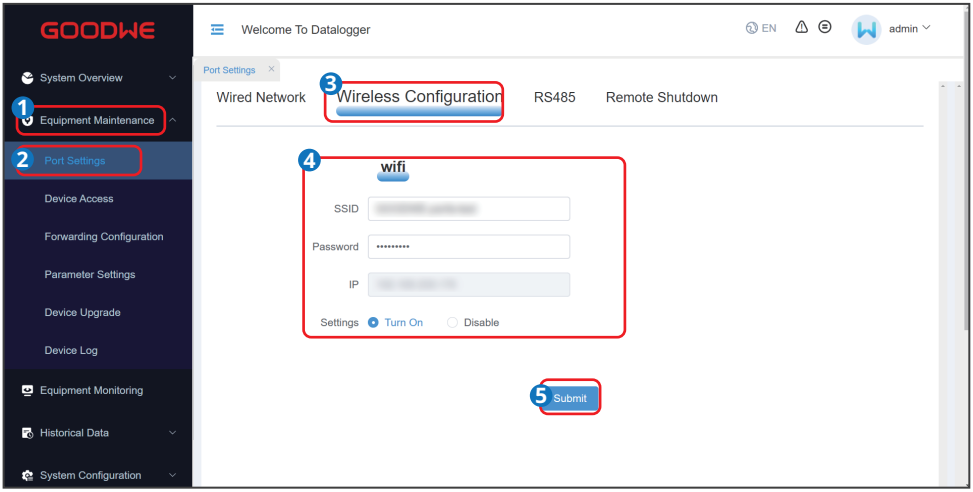
Set the related parameters, and click “Submit” to complete the setting.

Wired Network



Parameter	Description
Acquisition method	• Manually set the fixed network parameters based on actual situation when selecting STATIC mode. • The IP address can be obtained automatically when selecting DHCP mode
IP address	Set the IP address of the EzLogger. Set the IP address on the same network segment as the router IP address, and based on the power plant planning. If the IP address is modified, log in with the new IP address.
Subnet mask	Set the subnet mask of the EzLogger. Set the parameter based on the actual subnet mask of the router connected to the EzLogger.
Default gateway	Set the default gateway of the EzLogger. Set the parameter based on the actual gateway of the router connected to the EzLogger.
Preferred DNS server	Set the parameter as the IP address of the LAN’s router when connecting to a public network, for example, connecting to GoodWe server, using a domain name for the server address.
Alternate DNS server	Ignore this parameter in common situations. When the preferred DNS server fails to resolve a domain name, use the alternate DNS server.

Wireless Configuration

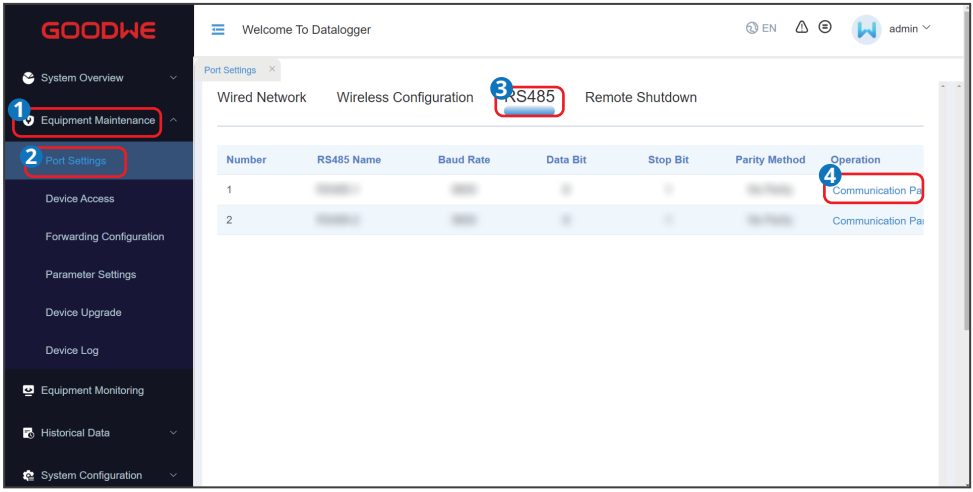


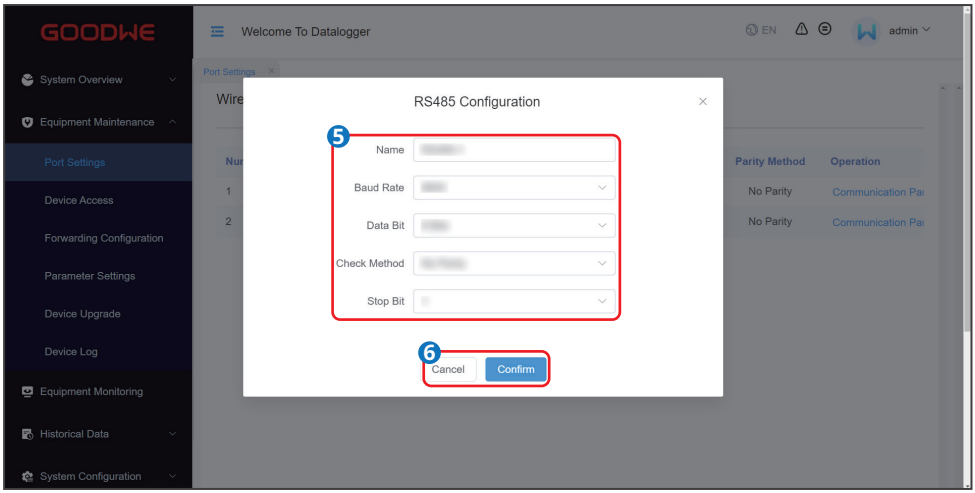
Parameter	Description
SSID	Select the wireless network based on actual situation.
Password	The password of the actual selected wireless network.
Settings	Enable or disable WiFi settings.

NOTICE

- After setting the WiFi information, you can go to the router management page to view the IP assigned to the data collector by the router. Enter **https://XX.XX.XX.XX**, or **http://XX.XX.XX.XX:443** in the address bar of the web browser and press **Enter**. XX.XX refers to the IP address of the EzLogger and 443 is the default port setting of https.
- Disconnect the network cable between the EzLogger and the router after enabling WiFi communication. Otherwise, the communication may fail.

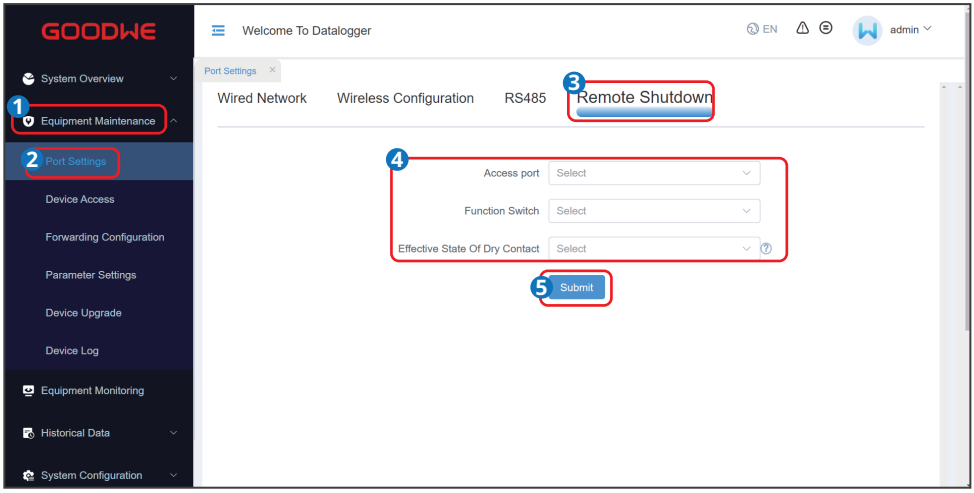
RS485





Parameter	Description
RS485 name	Select based on the actual RS485 port the equipment connected to.
Baud rate	Set according to the baud rate of the connected equipment. Supported baud rate: 300, 1200, 2400, 9600, 19200, and 115200.
Data bit	Supported values: 7 bits or 8 bits.
Check method	Set according to the parity check method of the connected equipment. Supported values: odd parity, even parity, 1 checksum, 0 parity, and no parity.
Stop bit	Set according to the stop bit of the connected equipment. Supported values: 1, 1.5, and 2.

Remote Shutdown



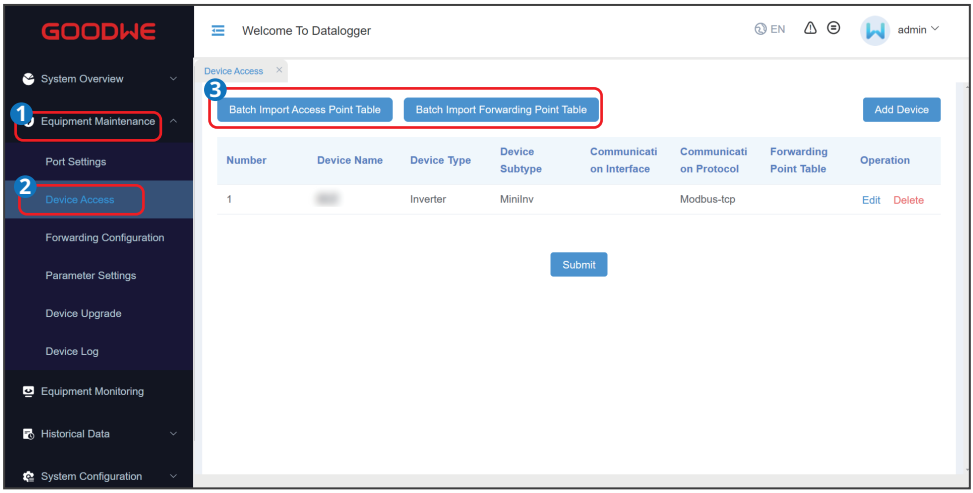
Parameter	Description
Access port	Select based on the actual DI port the equipment connected to. Supported values: DI1, DI2, DI3, DI4, and none.
Function switch	Set the status of the remote shutdown function. Support to be set as enable or disable.
Effective state of dry contact	Set the state according to the actual state of the dry contact. Support to be set as disconnect or closure.

8.4.2 Adding Devices

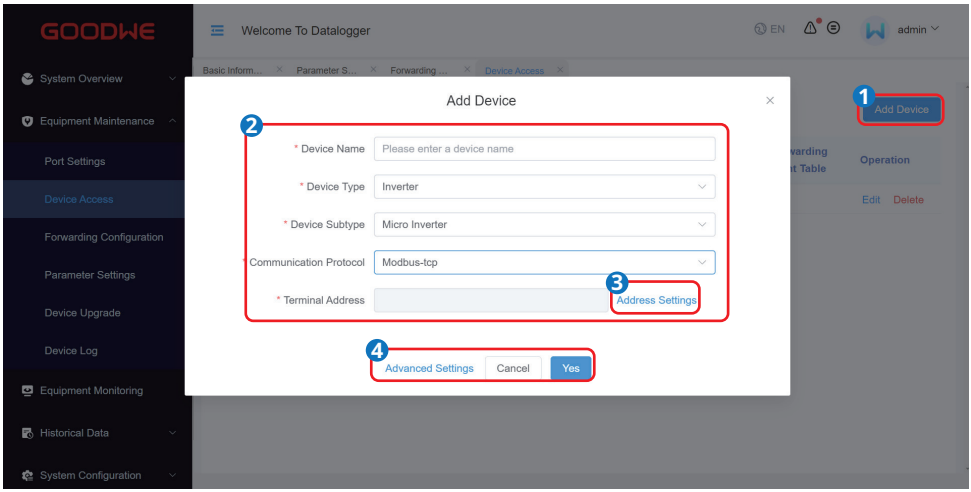
Step 1 Import the access point table and forwarding point table of the connected devices.

NOTICE

- Support batch import of access point tables and forwarding point tables the connected devices. It is recommended to import all the point tables of inverters, meters, and other devices connected to the EzLogger before adding devices.
- Contact the after-sales service center to obtain the device access point table and forwarding point table.



Step 2 Add devices.



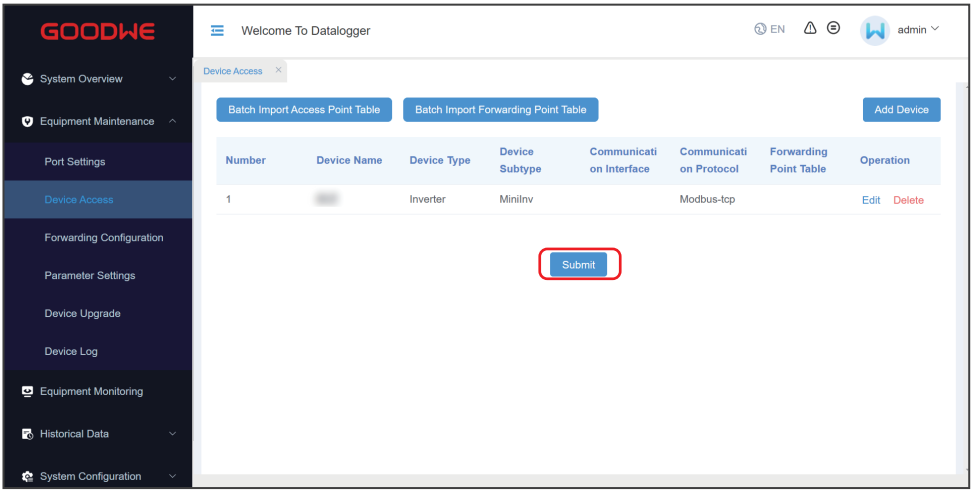
Add an inverter

Parameter	Description
Device name	Define the device name based on actual needs.
Device type	Select **Inverter**.
Device subtype	Select **Micro Inverter**.
Communication protocol	Set the parameter based on the communication protocol of the inverter. Support Modbus-TCP.
Terminal address	Device address. Set the parameter based on the actual power plant planning. Select **Auto-Generate** when there is no need to set the parameters based on the actual settings.

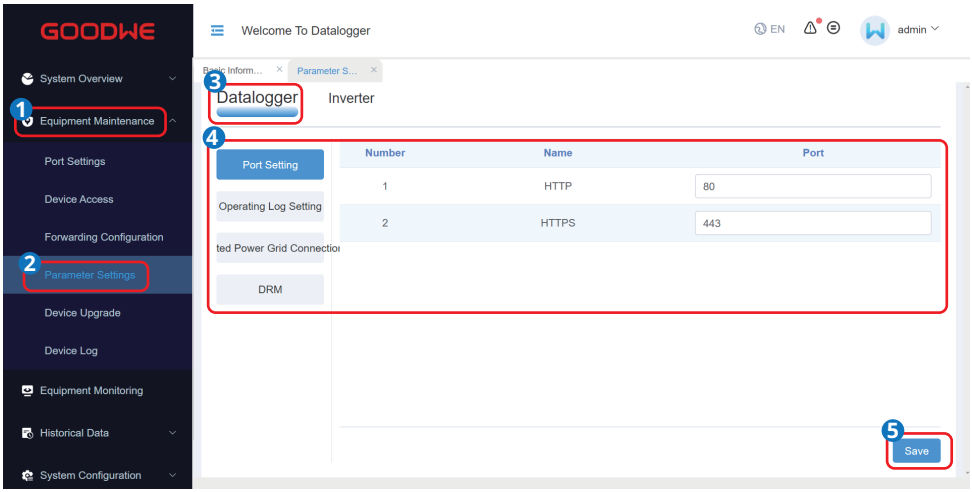
Add a smart meter

Parameter	Description
Device name	Define the device name based on actual needs.
Device type	Select **Meter**.
Communication protocol	Set the parameter based on the communication protocol of the smart meter. Support Modbus-RTU.
Communication interface	Select the actual port on the EzLogger which the smart meter is connected to. Support: RS485-1, RS485-2, RS485-3, RS485-4.
Device subtype	Select the subtype based on the actual model of the smart meter.
Terminal address	Device address. Set the parameter based on the actual power plant planning. Select **Auto-Generate** when there is no need to set the parameters based on the actual settings.

Step 3 After completing the parameter settings, click **Submit**.



8.4.3 Setting EzLogger Parameters



Port setting

Parameter	Description
HTTP	Set the parameter based on the EzLogger port number.
HTTPS	

Operating log setting

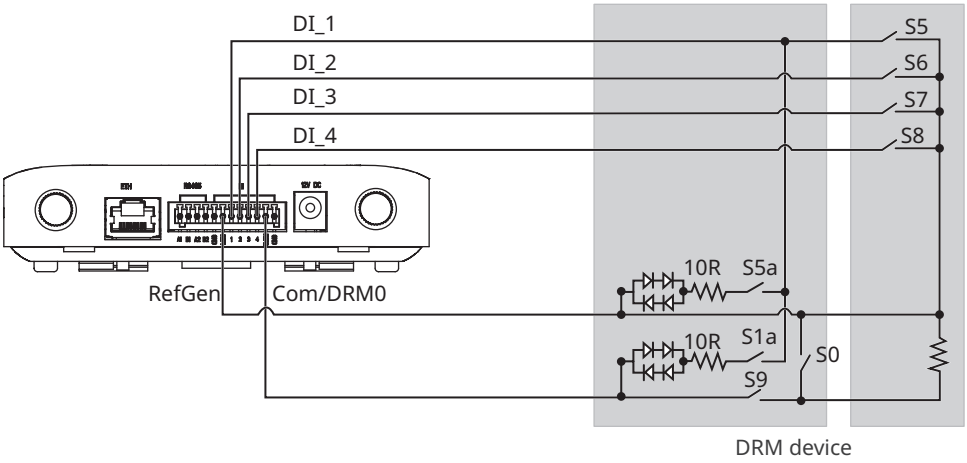
Parameter	Description
Log file size	Set the size and quantity of log files to be stored according to the actual demanding.
Number of log files	

Limited power grid connection

Parameter	Description
Meter selection	Select the actual smart meter connected to the EzLogger.
Limit mode	Select the way to control the output power of the equipment based on the actual requirements. • Total power: the total power at the grid-connection point does not exceed the output power limit. • Single power: the total power of each phase at the grid-connection point does not exceed the output power limit.
System installed capacity	The total capacity of all the inverters in the system.
Maximum feed in power	Set the maximum power that can be fed into the utility grid according to the regulations or requirements of certain countries or regions.

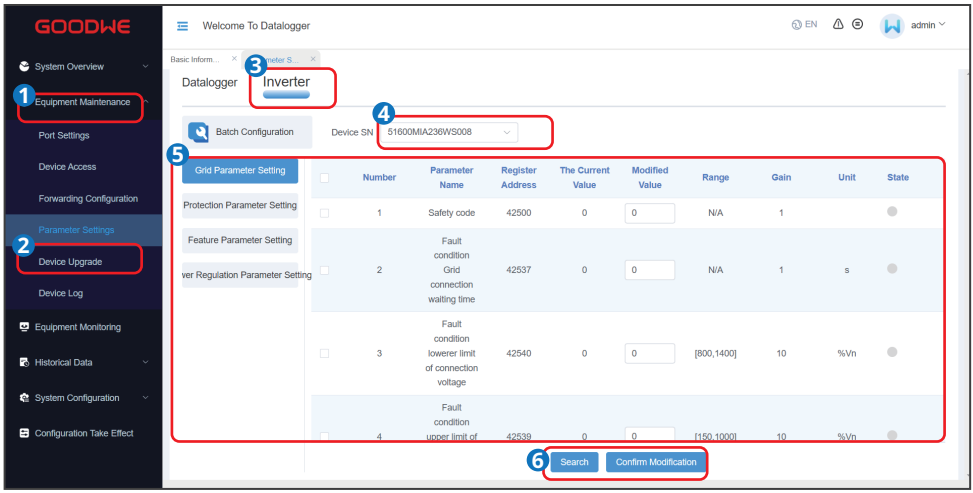
Parameter	Description
Maximum feed in protection factor	Set the protection factor to limit the actual power that can be fed into the utility grid. For example, if the protection factor is set to 90%, the actual power that can be fed to the grid is 90% * the maximum power fed to the grid.
Inverter power adjustment time	Set the minimum time interval at which the inverter adjusts power.
Maximum protection time	According to the regulations or requirements of certain countries or regions, the power feed into the utility grid is allowed to exceed the limit within a specified time. Set the maximum duration from when the EzLogger detects that the power feed into the utility grid has exceeded the limit to when the power is adjusted to the limit.
Meter communication abnormal	If this function is enabled, protective measures will be taken when the meter communicates abnormally with EzLogger.
Merter abnormal processing method	According to the regulations or requirements of certain countries or regions, set protective measures to be taken when the meter communicates abnormally with EzLogger. Support the following methods: • Power percentage: The equipment keeps working at a percent of rated power. • Shutdown processing: The equipment stops working.
Inverter Communication Abnormal Processing	If this function is enabled, protective measures will be taken when the inverter communicates abnormally with EzLogger.
Inverter communication Cycle	Set the communication period between the inverter and the EzLogger.
Inverter Abnormal Processing Method	According to the regulations or requirements of certain countries or regions, set protective measures to be taken when the inverter communicates abnormally with EzLogger. Support the following methods: • Power percentage: The equipment keeps working at a percent of rated power. • Shutdown processing: The equipment stops working.
Start Control	Enable Start Control to start export power limit function.

DRM



Parameter	Description
REF Gen Access Port	Corresponds to the Ref1 port of EzLogger. When S0 is connected, the inverter is shut down. When S0 is disconnected, the inverter is connected to the utility grid.
DRM0 Access Port	Corresponds to the Ref2 port of EzLogger. When S0 is connected, the inverter is shut down. When S0 is disconnected, the inverter is connected to the utility grid.
DRM5 Access Port	Corresponds to the DI1 port of EzLogger. When S5 is connected, the inverter does not output active power.
DRM6 Access Port	Corresponds to the DI2 port of EzLogger. When S6 is connected, the output active power of the inverter does not exceed 50% of the rated power.
DRM7 Access Port	Corresponds to the DI3 port of EzLogger. When S7 is connected, the output active power of the inverter does not exceed 75% of the rated power, and the inverter can consume the maximum reactive power.
DRM8 Access Port	Corresponds to the DI4 port of EzLogger. When S8 is connected, the inverter outputs full power if there is no other DRM restriction.
Function Switch	Enable DRM function. According to Australian regulations and requirements, inverters shall meet Demand Response Modes(DRM) certification.

8.4.4 Setting Inverter Parameters



Grid Parameters

Parameter	Description
Safety code	Select based on the grid standards of the country/region where the inverter is located and its application scenario.
Fault condition Grid connection waiting time	Set the waiting time for the inverter to restart after a grid failure is restored.
Fault condition upper limit of connection voltage	According to the standards and requirements in some countries and regions, the inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is higher than the **Fault condition upper limit of connection voltage**.
Fault condition lower limit of connection voltage	According to the standards and requirements in some countries and regions, the inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is lower than the **Fault condition lower limit of connection voltage**.
Fault condition upper limit of connection frequency	According to the standards and requirements in some countries and regions, the inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is higher than the **Fault condition upper limit of connection frequency**.
Fault condition lower limit of connection frequency	According to the standards and requirements in some countries and regions, the inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is lower than the **Fault condition lower limit of connection frequency**.
voltage of Enter the curve (0.1%)	Set the trigger voltage value for reactive power compensation according to the (cos -P) curve.
voltage of quit the curve(0.1%)	Set the exit voltage value for reactive power compensation according to the (cos -P) curve.

Protection Parameters

Parameter	Description
ISO Limit Set	To protect the equipment, the inverter performs an insulation impedance check on the input side during self-check at startup. If the measured value is lower than the set value, the inverter will not connect to the grid.
10min overvoltage trigger value (0.1%)	Set the 10min overvoltage protection threshold value.
10min trigger trip time	Set the 10min overvoltage protection tripping time.
Overvoltage trigger first order value(0.1%)	Set the Level N overvoltage protection threshold value.
Overvoltage trigger first-order trip time	Set the Level N overvoltage protection tripping time.
Undervoltage trigger first order value(0.1%)	Set the Level N undervoltage protection threshold value.
Undervoltage trigger first-order trip time	Set the Level N undervoltage protection tripping time.
Overfrequence trigger first order value(0.1%)	Set the level N overfrequency protection threshold value.
Overfrequence trigger first-order trip time	Set the Level N overfrequency protection tripping time.
Underfrequence trigger first order value(0.1%)	Set the level N underfrequency protection threshold value.
Underfrequence trigger first-order trip time	Set the Level N underfrequency protection tripping time.

Feature Parameters

Parameter	Description
E_Total	Set the initial power generation of the inverter. In scenarios where the inverter is replaced, set the initial value of the new inverter's power generation to the total power generation of the original inverter, to ensure the continuous accumulation of power generation.
LVRT enable	• The inverter will not be disconnected from the utility grid immediately when the grid voltage is abnormally low for a short time. • Enable this feature, the inverter's LVRT is being activated.
The judgment threshold of entering LVRT	Set the threshold for triggering LVRT in compliance with local laws and regulations.
HVRT enable	• The inverter will not be disconnected from the utility grid immediately when the grid voltage is abnormally high for a short time. • Enable this feature, the inverter's HVRT is being activated.
The judgment threshold of entering HVRT	Set the threshold for triggering HVRT in compliance with local laws and regulations.
The judgment threshold of quiting LVRT	Set the threshold for exiting LVRT in compliance with local laws and regulations.
The judgment threshold of quiting HVRT	Set the threshold for exiting HVRT in compliance with local laws and regulations.
Island mode	Set whether to enable the Island mode.
Frequency shift protect threshold value	Set the parameter to protect the inverter when the grid frequency changes too fast.

Power Regulation Parameters

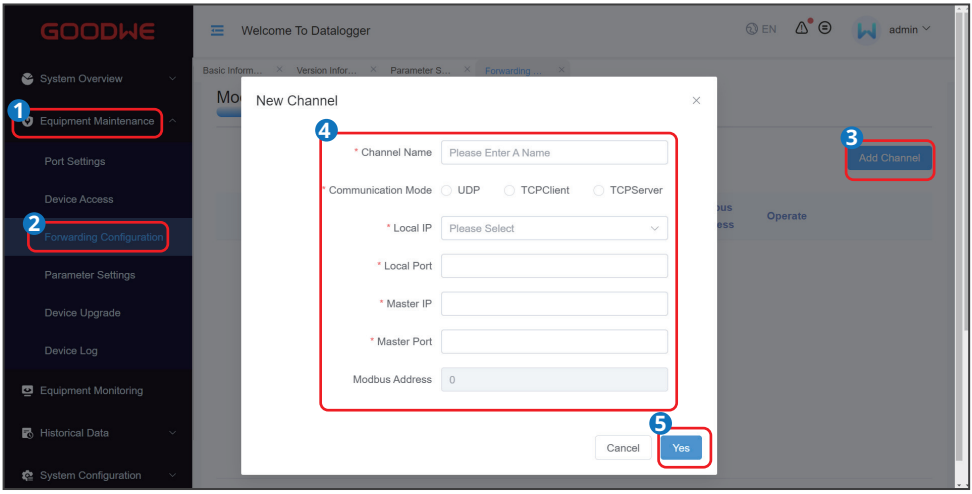
Parameter	Description
Active power gradient	Set the change speed of the inverter‘s active power.
Active power fixed value derating	Adjust the active power output of the inverter by fixed value.
Active power percentage derating(0.1%)	Adjust the active power output of the inverter by percentage.

Parameter	Description
Reactive power gradient	Set the change speed of the inverter's reactive power.
Reactive power compensation(PF)	Set the reactive power output from the inverter.
Reactive power compensation(Q/S)	Set the reactive power output from the inverter.
Over frequency Point	The standards of certain countries and regions require that the output active power of inverters be derated when the power grid frequency exceeds a certain value.
Hysteresis frequency Point	Set the frequency threshold for exiting over-frequency derating.
P(F) power slope(Slope)	Set the decreasing speed of the overfrequency derating.
Recover power slope	Set the recovering speed of the overfrequency derating.
P(F) Curve Eable	According to the standard requirements of some countries/regions standards, the inverter shall increase the active power output, when the grid frequency is lower than under frequency point. Enable this parameter to increase the grid frequency.
Output power lower limit	Set the overfrequency derating output power limit
Power response filtering time	Set the filtering time for power recovering.
PU curve enable	The standards of certain countries and regions require that the output active power of inverters be derated when the power grid frequency exceeds a certain value.
Voltage3(0.1%)	The percentage of actual voltage to the rated voltage at V3 point.
Voltage4(0.1%)	The percentage of actual voltage to the rated voltage at V4 point.
Active power 4(0.1%)	The percentage of active output power to the apparent power at V4 point.
Under frequency Point	Set the frequency threshold of Underfrequency rise power.
Recover power slope	Set the recovery rate of underfrequency rise power.
Output power upper limit	Set the exit frequency of underfrequency rise power.
Hysteresis frequency Point	Set the cutoff power of underfrequency rise power.

8.4.5 Setting Forwarding Parameters

Modbus-TCP parameters

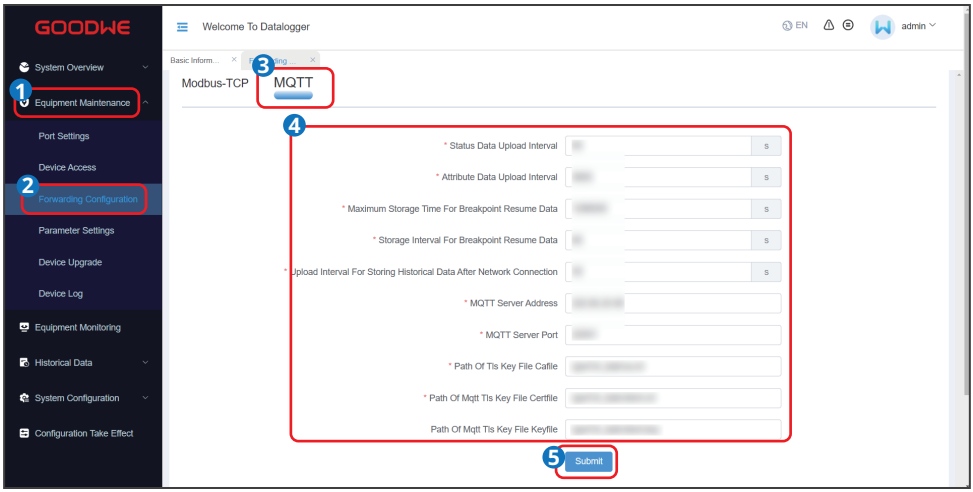
Set Modbus-TCP parameters when EzLogger is connected to a management system via the Modbus-TCP protocol.



Parameter	Description
Channel Name	Supports to define the device name based on the actual situation.
Communication Mode	Set based on the communication mode used between EzLogger and the Modbus-TCP management system. Currently support: UDP, TCPClient, TCPServer.
Local IP	Set the parameter as the IP address of the EzLogger.
Local Port	Set the parameter as the port number of EzLogger. The default value is "502".
Master IP	Set the parameter as the IP address of the Modbus-TCP management system.
Master Port	Set the parameter as the port number of the Modbus-TCP management system.
Modbus Address	The Modbus-TCP management system address.

MQTT

Set MQTT parameters when EzLogger is connected to the GoodWe management system via the MQTT protocol.
Consult the after-sales service center for the specific parameter configuration.



9 Maintenance

9.1 Routine Maintenance

DANGER

Power off the EzLogger before operations and maintenance. Otherwise, the EzLogger may be damaged or electric shocks may occur.

Maintaining Item	Maintaining Method	Maintaining Period
Electrical Connection	Check whether the cables are securely connected. Check whether the cables are broken or whether there is any exposed copper core.	Once 6 months or once a year
Environmental inspection	Check whether there is any high electromagnetic interference devices or heat sources around the EzLogger.	Once 6 months or once a year

9.2 System Maintenance (WEB)

9.2.1 Upgrading

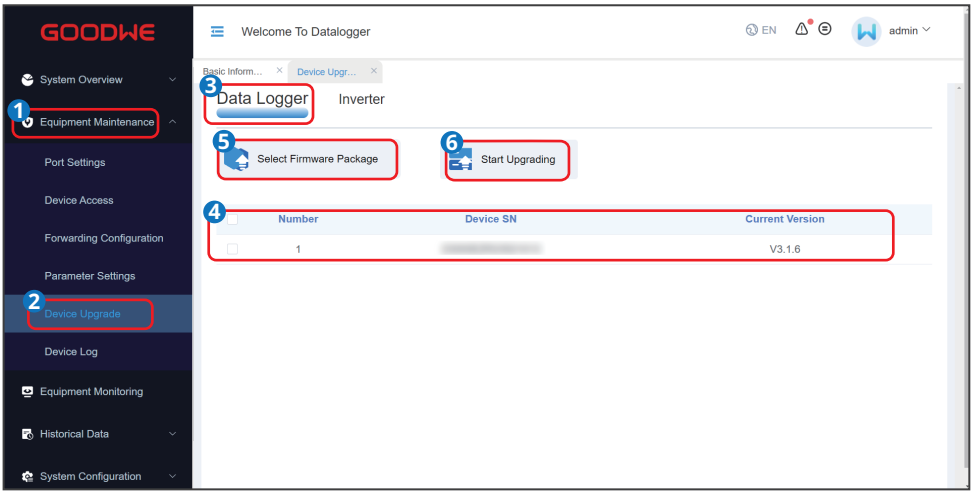
Upgarding via USB flash drive

Step 1 Obtain the upgrading package.
Step 2 Store the package into a USB flash drive, and insert the drive into the computer's USB port.

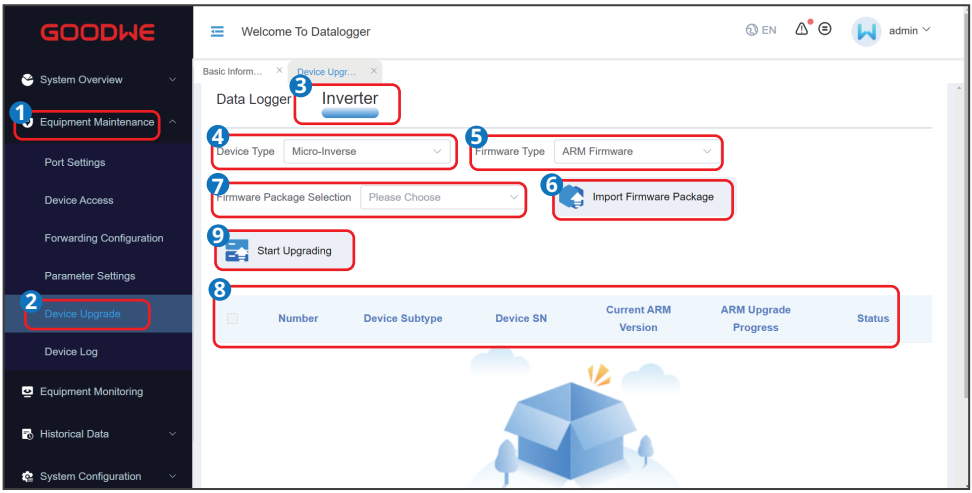
Upgarding via WEB

Step 1 Obtain the upgrading package.
Step 2 Keep the upgrading package on Local Disk of the computer and follow the steps below.

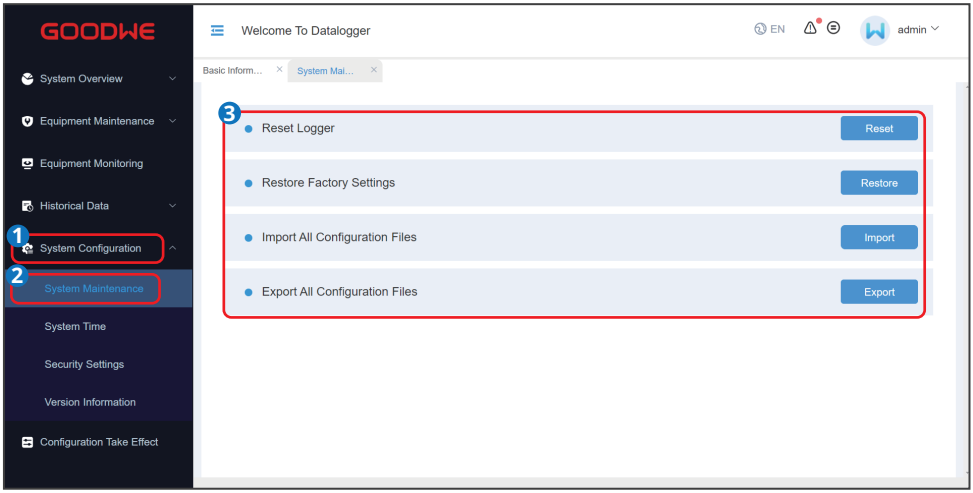
Upgrade the EzLogger



Upgrade the inverter



9.2.2 Maintaining the System

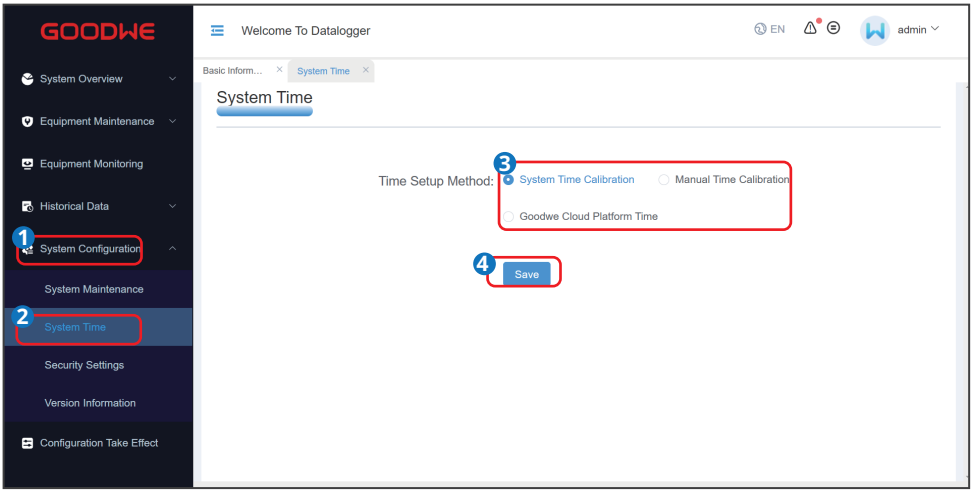


Parameter	Description
System Reset	Perform a system reset, and the EzLogger will automatically shut down and restart.
Restore Factory Settings	After restoring factory settings, all parameter values that have been set (except for current date, time, and communication parameters) will be restored to the factory default state. Operational information, alarm records, and system logs will not be affected. Please proceed with caution when performing this operation. Initial password for login: 123456.
Full Configuration File Export	Before replacing the EzLogger, export the configuration file to the local storage.
Full Configuration File Import	After replacing the EzLogger, import the previously exported configuration file from the local storage to the new EzLogger. Once the import is successful, the EzLogger will restart, and the configuration file will take effect. Confirm that the device parameters are correctly configured.

9.2.3 Set System Time

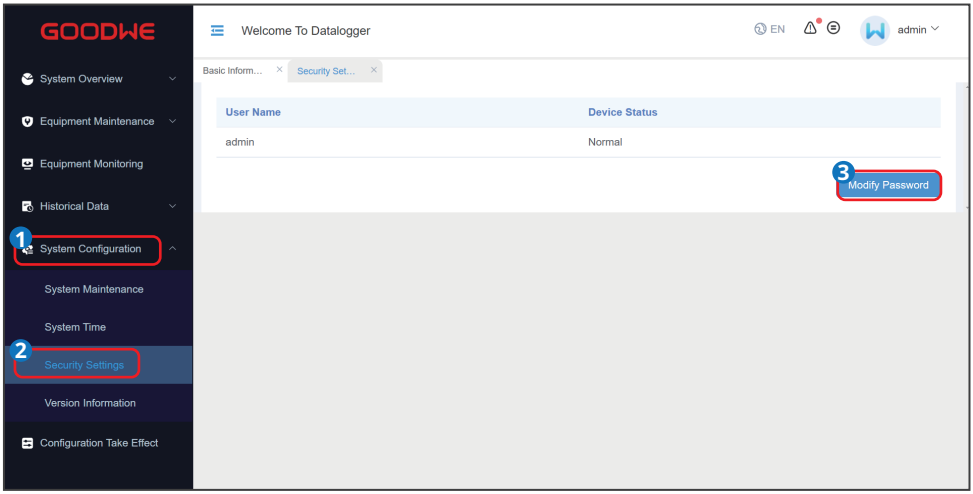
NOTICE
Modifying the date and time will affect the integrity of the system's power generation and performance data records. Please refrain from changing the time zone and system time arbitrarily.

Step 1: Set the system time according to the following operation.



Parameter	Description
System Time Synchronization:	Currently, time synchronization can be performed through Goodwe Cloud Platform.
Manual Time Synchronization:	Set the local time zone, date, and time based on actual settings.

9.2.4 Change Login Password



9.3 Power Off

DANGER

Power off the EzLogger before operations and maintenance. Otherwise, the EzLogger may be damaged or electric shocks may occur.

Disconnect the power adapter from the device and AC socket.

9.4 Removing the EzLogger

WARNING

- Make sure that the EzLogger is powered off.
- Wear proper PPE before any operations.

Step 1 Disconnect all electrical connections of the equipment, including the power cable and communication cables.

Step 2 Remove the equipment.

Step 3 Store the equipment properly. If the equipment will be used again in the future, ensure that the storage conditions meet the requirements.

9.5 Disposing of the EzLogger

If the equipment cannot work any more, dispose of it according to the local disposal requirements for electrical equipment waste. Do not dispose of it as household waste.

9.6 Troubleshooting

Perform troubleshooting according to the following methods. Contact the after-sales service if these methods do not work.
Collect the information below before contacting the after-sales service, so that the problems can be solved quickly.

1. Equipment information like serial number, software version, installation date, fault time, fault frequency, etc.
2. Installation environment. It is recommended to provide some photos and videos to assist in analyzing the problem.
3. Utility grid situation.

No.	Fault	Cause	Solutions
1	 indicator off	The power input cable is not securely connected	Ensure that the power input cable is connected securely.
		The power adapter is not securely connected to the socket.	Ensure that the power adapter is connected to the socket securely.
		The power adapter is malfunctioning.	Contact your distributor or after-sales service center to replace the power adapter.
		Equipment malfunction	Contact your distributor or after-sales service center.
2	 indicator on	Abnormal working status	Restart the equipment.
		Equipment malfunction	Contact your distributor or after-sales service center.
3	 indicator off	Abnormal working status	Restart the equipment.
		Equipment malfunction	Contact your distributor or after-sales service center.
4	 indicator fast blink	The equipment is connected to the router but not connected to the server.	Ensure that the router is connected to the network.
5	 indicator slow blink	The equipment is not connected to the router.	Ensure that the router is ok and the network settings are proper.
6	Fail to connecte the external RS485 devicec	RS485 wiring abnormal	Check if the cable connections are correct and secure.
		RS485 communication parameter setting abnormal.	Recheck and set the RS485 communication parameters.
		Equipment malfunction	Contact your distributor or after-sales service center.

No.	Fault	Cause	Solutions
7	Fail to enter the WEB setting page	Wrong connection parameters	Ensure that the IP address and equipment port are correct.
		Browser exception.	Clear browser history data or cache.
		Network cable exception.	Ensure that the network cable is connected properly, and the IP address of the PC and the equipment are in the same segment.
		Wireless network exception.	Ensure that the PC and the equipment are connected to the same wireless network.
		Equipment malfunction	Contact your distributor or after-sales service center.

10 Technical Parameters

Technical Parameters	EzLogger3000R
Device management	
Max. Number Of Connected Devices	10
Electrical	
AC power supply	AC input: 100-240V, 50/60Hz; DC output:12V
DC power supply	12V/1.5A
Power Consumption(W)	≤2.5
Communication Interface	
LAN	1
RS485	COM * 2
Digital/Analog Input/ Output	DI * 4
Communication Protocol	
Ethernet	MODBUS-TCP
RS485	MODBUS-RTU
User Interface	
LED	LED * 4
WEB	Embedded Web
USB	USB2.0 * 1
Mechnical	
Dimensions (W x H x D)Mm	124*119.5*89.5
Weight (Kg)	0.25
Installation Method	Wall Mounting / Desktop Mounting
Environment	
Operating Temperature Range(℃)	-20-+60
Storagec Temperature Range(℃)	-30-+75
Relative Humidity	0-95%
Max. Operating Altitude(M)	2000
Ingress Protection Rating	IP20

GoodWe Website

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